AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-30. (Canceled).

31. (Currently Amended) An inhibitor of HIV replication, comprising an antiviral peptide, wherein:

the antiviral peptide consists of ~~or analog comprising a decapeptide, said~~a decapeptide containing (from the N-terminus to the C-terminus) a basic amino acid ~~in~~ at position 1~~,~~; an acidic amino acid ~~in~~ at positions 2 and 5~~,~~; ~~and~~ a tryptophan ~~in~~ at positions 4, 7, and 8; ~~wherein:~~

~~the amino acid at position 3 is~~ a threonine, isoleucine or valine at position 3; ~~a~~ ~~the amino acid at position 6 is~~ threonine, alanine, ~~and~~ or glutamine at position 6; ~~a~~ ~~the amino acid at position 9 is~~ threonine, alanine, valine, isoleucine, methionine, or aspartate at position 9; and ~~the amino acid at position 10 is~~a glutamate, aspartate or asparagine at position 10; and

the decapeptide inhibits the dimerization of HIV reverse transcriptase.

32. (Currently Amended) The inhibitor of claim 31, wherein the basic amino acid ~~in~~ at position 1 is lysine or arginine.

33. (Currently Amended) The inhibitor of claim 31, wherein the acidic amino acid ~~in~~ at position 2 is glutamate.

34. (Previously Presented) The inhibitor of claim 31, wherein the amino acid at position 5 is glutamate.

35. (Currently Amended) ~~A pharmaceutical composition comprising~~ ~~the~~The inhibitor of ~~HIV replication of~~ claim 31, further comprising ~~and~~ a pharmaceutically acceptable excipient.

36. (New) The inhibitor of claim 31, further comprising a vector that allows penetration of the antiviral peptide into a mammalian cell.

37. (New) The inhibitor of claim 36, wherein the vector is selected from the group consisting of: a liposome, a polymeric protein-binding cation, a protein, a peptide, a microparticle, and a nonoparticle.

38. (New) The inhibitor of claim 37, wherein the vector is a peptide.

39. (New) The inhibitor of claim 38, wherein the peptide is an MPG peptidyl carrier.

40. (New) The inhibitor of claim 39, wherein the MPG peptidyl carrier comprises SEQ ID NO: 2 or SEQ ID NO: 3.

41. (New) The inhibitor of claim 39, wherein the MPG peptidyl carrier and the antiviral peptide are in the form of a complex.

42. (New) The inhibitor of claim 41, wherein the complex comprises the MPG peptidyl carrier and the antiviral peptide at a ratio of about 20 molecules of the MPG peptidyl carrier for 1 molecule of the antiviral peptide.

43. (New) The inhibitor of claim 31, wherein the antiviral peptide is SEQ ID NO: 1.

44. (New) The inhibitor of claim 42, wherein the antiviral peptide is SEQ ID NO: 1.

45. (New) An inhibitor of HIV replication comprising a chimeric peptide, wherein the chimeric peptide comprises:

(a) a decapeptide containing (from the N-terminus to the C-terminus) a basic amino acid at position 1; an acidic amino acid at positions 2 and 5; a tryptophan at positions 4, 7, and 8; a threonine, isoleucine or valine at position 3; a threonine, alanine, or glutamine at position 6; a threonine, alanine, valine, isoleucine, methionine, or aspartate at position 9; and a glutamate, aspartate or asparagine at position 10; wherein the decapeptide inhibits the dimerization of HIV reverse transcriptase, and

(b) an MPG peptidyl carrier peptide.

46. (New) The inhibitor of claim 45, wherein the basic amino acid ~~in~~ at position 1 is lysine or arginine.

47. (New) The inhibitor of claim 45, wherein the acidic amino acid ~~in~~ at position 2 is glutamate.

48. (New) The inhibitor of claim 45, wherein the amino acid at position 5 is glutamate.

49. (New) The inhibitor of claim 45, further comprising a pharmaceutically acceptable excipient.

50. (New) The inhibitor of claim 45, wherein the MPG peptidyl carrier peptide is SEQ ID NO: 2 or SEQ ID NO: 3.

51. (New) The inhibitor of claim 45, wherein the decapeptide is SEQ ID NO: 1.

52. (New) The inhibitor of claim 45, wherein the chimeric peptide is SEQ ID NO: 4.

53. (New) The inhibitor of claim 45, wherein the chimeric peptide is SEQ ID NO: 6.